

Appendix H

Northern Trauma Care Region Trauma Plan

NORTH MISSISSIPPI TRAUMA SYSTEM, INC

REGIONAL

TRAUMA

PLAN

July 2004

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SUMMARY

The North Mississippi Trauma Region is comprised of eighteen counties in the northeastern portion of the state. The region is vastly rural with an estimated population of 499,685. To date there are seventeen hospitals in the Region which operate an Emergency Room. Currently sixteen of those facilities are either fully or partially designated as Trauma Centers by the Mississippi State Department of Health, and participate in the North Mississippi Trauma System, Inc. Two counties, Benton and Itawamba, do not have a hospital. Customary referral patterns demonstrate transfers to North Ms Medical Center in Tupelo, MS, BMH-Golden Triangle in Columbus, MS, The Med in Memphis, TN, BMH-North MS in Oxford, MS, and Oktibbeha County Hospital in Starkville, MS, and University Medical Center in Jackson, MS.

The Region's administrative structure includes a Board of Directors comprised of one administrative and one physician member from each facility participating in the State Trauma System, either designated or awaiting designation. The Board has three committees; Executive, Medical Control/QA, and Trauma Program Manager. Financial resources of the Region are managed by the Executive committee adhering to the budgetary process outlined by the Trauma System Regulations of the MSDOH. Administrative funding is received from the MS State Department of Health on a yearly basis.

Currently there are two BLS, one Intermediate, and fourteen ALS Emergency Medical Service Providers operating in the Region. North Mississippi Medical Center also operates a helicopter ambulance service.

Major problems in the Region are outlined below:

1. Medical Control in the Region is not regulated so that ambulance services in the region are mandated to have medical control residing in the region. Currently, there are ambulance services operating in our region receiving medical control in other regions and other states.

2. Participating facilities are complaining that they are having difficulty getting transfer agreements signed.

Trauma facility standards in the region are mandated in the Trauma System Regulations set forth by the MSDOH.

The Region has a good relationship with the other regions in the State. Periodically educational offerings are opened to providers across the state. Each facility in the Region also has transfer agreements with facilities in other regions for Level I care, Pediatric Care, Burn Care and Rehabilitative Care.

The North Ms Trauma System, Inc. Regional Plan is a comprehensive document which outlines the planning, education, implementation, care and performance improvement of medical trauma management in North Mississippi. Key to the success of our Plan is the involvement of providers, a common education on objectives and mechanisms, certification of provider abilities, State funding, coordination of patient handling from scene to discharge, and performance improvement.

OBJECTIVES

The goal of the Regional Trauma Plan is to develop a trauma system for the North Mississippi Trauma Care Region in which all the components of optimal trauma care are identified and given available resources, to provide that care to best meet the needs of all injured patients; wherever they are injured and wherever they receive care within the Region. Specific objectives to achieve this goal include:

1. Develop a program directed to the public for the purpose of preventing traumatic injuries. This is best accomplished by use of the trauma registry data to identify the pattern, frequency, and risks of injury within the Region to give an accurate picture of injury occurrence.
2. Establish a standardized response system to trauma that will enable the providers to improve clinical care and to deliver the patient to the appropriate level of care in as little time as possible. The specific elements to be addressed include, but are not limited to:
 - (a) Standardization of pre-hospital care policies.
 - (b) Standardization of hospital responses to the trauma patient.
 - (c) Coordination among EMS providers and hospitals to deliver the patient to the nearest most appropriate facility.
3. Provide educational opportunities for physicians, clinical staff, pre-hospital personnel, and the public regarding trauma care.
4. Development of a Performance Improvement Plan to continually evaluate the system.
5. Maintain commitment from the participating hospitals and physicians to the system through representation on the Region's Board of Directors and participation in Regional Trauma Programs.

6. Encourage the region's hospitals to incorporate the trauma patient's rehabilitation in to their plan of care. The Region shall also encourage the providers of rehabilitative medicine to develop programs geared to the patients of trauma.
7. Participation, upon request, in any State sponsored research projects relating to trauma and trauma care.

Enormous costs are associated with the treatment of injuries. In an environment of limited health care resources, effective prevention strategies, standardization of care practices, and increased education have the potential to reduce these costs.

Ultimately through the realization of these goals, the objective of the Mississippi Trauma Care System, as well as North Mississippi Trauma System, Inc., is to prevent loss of human life, and to prevent diminution in quality of life, resulting from traumatic injury.

IMPLEMENTATION SCHEDULE

Ongoing	Maintain commitment from the participating hospitals and physicians to the system through representation on the Region's Board of Directors and participation in Regional Trauma Programs.
Ongoing	Participation, upon request, in any MSDOH sponsored research projects related to trauma or trauma care.
12/12/00	Regional Trauma Plan presented to Board of Directors for approval.
12/31/00	Regional Trauma Plan submitted to MSDOH for review.
7/01/01	Began providing educational opportunities for physicians, clinical staff, pre-hospital personnel and the public regarding trauma care.
8/01/01	Begin implementation of injury prevention programs in the Region.
10/01/01	Regional Trauma Plan submitted to MSDOH for approval.
11/01/01	Begin implementation of Regional Policies and Procedures.
12/01/01	Begin implementation of PI Plan to continually evaluate the trauma system.
12/1/02	Tippah County Hospital achieves full designation as a Level IV Trauma Center.
3/01/02	Establish a standardized response system to trauma that will enable the providers to improve clinical care and to deliver the patient to the most appropriate level care in as little time as possible.

	Begin encouraging the Region's hospitals to incorporate the trauma patient's rehabilitation into their plan of care.
10/1/03	Educated EMS Providers regarding the EMS Trauma PI Plan.
1/1/04	Began data collection for EMS Trauma PI Plan.
2/1/04	BMH-Golden Triangle and North MS Medical Center achieve full designation as Level II Trauma Centers.
Ongoing	Educational visits provided by the State to achieve full designation.
Ongoing	Inspection Process to achieve full designation.

ADMINISTRATIVE STRUCTURE

North Mississippi Trauma System, Inc. is a not-for-profit Mississippi Corporation, governed by a Board of Directors. The Board has administrative authority over the operation of the Trauma Region and subsequent trauma system programs. (*MTCSR*, SV. 5.1) In conformity with the regulatory framework established by the MSDOH, the Region functions administratively to ensure that the system is responsive to the needs of all injured persons and to adhere to realistic timeframes for system planning, development and implementation. The Region is charged with development and adoption of trauma standards, implementation of triage guidelines, establishment of a regional data collection system, and evaluating system performance.

The membership of the Region consists of hospitals that are providers of emergency medical services by way of medical treatment, medical transportation and medical treatment facilities within the North Mississippi Trauma System, Inc., as designated by the Mississippi State Department of Health, Division of Emergency Medical Services.

The Board of Directors is comprised of two representatives from each participating facility. One representative shall be a member of the hospital's executive staff and the other shall be a member of the hospital's active medical staff. It is authorized to receive and expend funds as may be available for any necessary and proper trauma care program purposes in the manner provided for in the *Mississippi Trauma Care System Regulations* or in law. (*MTCSR*, SV. 5.3) The Board supports three committees, Executive, Medical Control/PI, and TNC/Education. Meetings of the Board of Directors are held the fourth Tuesday of the third month in the quarter.

A full time Regional Director oversees the day-to-day operations and administrative affairs of the Region, under the direction of the Executive Committee. (*MTCSR*, SV. 5.2)

The Executive Committee is represented by a mixture of administrators from each level and corporate system in the Region.

Responsibilities include the administrative operations of the Region, making recommendations to the Board at large, and financial management of the region. Meetings of the Executive Committee are held the fourth Tuesday of the first and second months in the quarter.

The Medical Control/PI Committee is made up of physicians, trauma program managers, and paramedics. Their role is to oversee the development of clinical protocols, set minimal standards for and review performance improvement issues. This committee shall promote region-wide standardization of pre-hospital care policies, procedures, and protocols. The Regional Medical Director serves as the Chair of this committee. Meetings of the Medical Control/PI Committee are held at the discretion of the Regional Medical Director.

The Trauma Program Manager's Committee consists of the Trauma Nurse Coordinator from each participating facility. This group is charged with insuring that educational needs in the region are being met at every level from pre-hospital to physician. They also collaborate on common problems areas and serve as an internal clearinghouse for ideas, policies, and practices. Meetings of the Trauma Nurse Coordinator/Education Committee are held every other month.

All committees formulate recommended policies and procedures and report them to the Board of Directors quarterly through the Committee Chair or the Regional Director, for a ruling on recommendations. The Board of Directors shall also appoint other non-standing committees as necessary.

Minimum standards for the system's performance will be based on the Plan Objectives and the regulatory requirements set forth by the Mississippi Trauma Care System. The PI Plan shall be the mechanism for measuring the system's performance.

The Region is required to provide documentation of formal referral agreements among all participating regional hospitals and, if necessitated by a lack of in-region service, documentation of linkages to other appropriate

out-of-region hospitals for referrals. The Region is also required to provide documentation of linkages to a Level I Trauma Center for training, education, and evaluation. Said Level I facility must be recognized by the MSDOH and committed to participation in the Mississippi State Trauma Care System. (*MTCSR*, SV. 5.4)

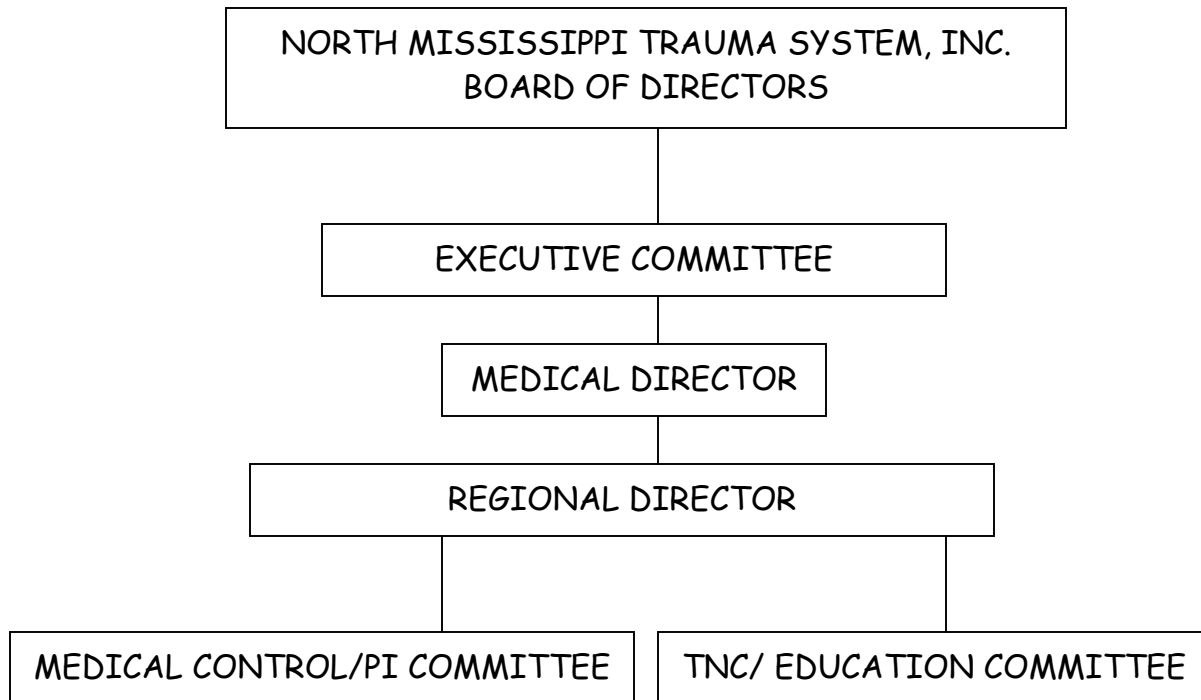
The business plan of the region is to establish a smooth operating organization for the system. Annual budgets are prepared and submitted to the MSDOH as regulated by the Mississippi Trauma Care System Regulations. A Regional Director will manage the daily administrative aspects of the organization. A member of the Executive Committee approves all expenses.

Monetary funding flows through two distinct methodologies. Administrative funds are used to manage administration of the region and originate from a five dollar surcharge attached to each moving violation fine assessed in the State. Public funds are equally distributed by the State to each region. Public funds are used to reimburse participating facilities and physicians and originate from the Trauma Care Trust Fund. The source of the Trust Fund is the State's allocation of the federal tobacco settlement. Both sets of funds are distributed annually.

Reimbursement will be allocated to providers based on methodology established by the MSDOH or its contracted accounting firm. After being directed to do so by the Board, the Region, upon receipt of the reimbursement, will distribute the allocated reimbursement amounts to the providers. Facilities receiving reimbursement from the patient or other third party payers will submit that reimbursement back to the Region according to the Mississippi State Trauma Care System Regulations. The MSDOH will conduct audits as regulated in *the Mississippi State Trauma Care System Regulations*.

NORTH MISSISSIPPI TRAUMA SYSTEM, INC.

REGIONAL ORGANIZATIONAL STRUCTURE



BYLAWS OF
NORTH MISSISSIPPI TRAUMA SYSTEM, INC.
A Mississippi Non-Profit Corporation

ARTICLE I
NAMES AND OFFICES

Section 1. Name. The name of the corporation is North Mississippi Trauma System, Inc, hereinafter referred to as the “corporation”.

Section 2. Principal Office. The principal office of the corporation shall be located at 830 South Gloster, Tupelo, Mississippi, which shall also be the corporation’s registered office in the State of Mississippi.

Section 3. Additional Offices. The corporation may also have offices at such other places, either within or without the State of Mississippi, as the board of directors may from time to time deem appropriate.

ARTICLE II
PURPOSES

The corporation is organized for the following purposes:

This corporation shall be a non-profit corporation.

- A. The purpose of the corporation is to organize, implement, review and monitor the delivery of trauma care within the geographic trauma care region (“Region”) designated by the Mississippi State Department of Health, Division of Emergency Medical Services, and to disburse the funds for such purpose made available through the Mississippi Trauma Care Systems Fund for the purposes set forth in the Miss. Code Ann Section 41-59-75 (Supp. 1998) or from any other funding sources; and to coordinate delivery of trauma care among hospitals for the citizens within the Region.
- B. The purposes for which North Mississippi Trauma System, Inc. is organized are exclusively charitable, scientific and educational within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, or the corresponding provision of any future U.S. Internal Revenue law.
- C. Notwithstanding any other provision of the Articles of Incorporation or these bylaws, this corporation shall not carry on any activities not permitted to be carried on by an organization exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code of 1986 or the corresponding provision of any future U.S. Internal Revenue law.

D. In the event of dissolution, the residual assets of the corporation will be turned over to one or more organizations described in Sections 501(c)(3) and 170(c)(2) of the Internal Revenue Code of 1986 or the corresponding provision of any future U.S. Internal Revenue Code, of the federal, state or local government for exclusive public purposes.

ARTICLE III MEMBERSHIP

Section 1. Eligibility. The membership of the corporation shall consist of hospitals that are providers of emergency medical services by way of medical treatment, medical transportation and medical treatment facilities within the North Mississippi Trauma System, Inc., as designated by the Mississippi State Department of Health, the Division of Emergency Medical Services (the “EMS Region”).

Section 2. Initial Members. The initial members of the corporation shall consist of the following hospitals.

- | | |
|---|--|
| 1) Magnolia Regional Health Center
611 Alcorn Drive
Corinth, MS 38834 | 8) BMH - North Mississippi
Post Office Box 946
Oxford, MS 38655-0946 |
| 2) Choctaw County Medical Center
Post Office Box 417
Ackerman, MS 39735-0417 | 9) BMH - Golden Triangle
Post Office Box 1307
Columbus, MS 39703-1307 10 |
| 3) NMHS Clay County Medical Center
835 Medical Center Drive
West Point, MS 39773 | 10) Oktibbeha County Hospital
Post Office Drawer 1506
Starkville, MS 39760-1506 |
| 4) Okolona Community Hospital
Post Office Box 420
Okolona, MS 38860-0420 | 11) Gilmore Memorial Hospital
Post Office Box 459
Amory, MS 38821-0459 |
| 5) Trace Regional Hospital
Post Office Box 626
Houston, MS 38851-0626 | 10) Oktibbeha County Hospital
Post Office Drawer 1506
Starkville, MS 39760-1506 |
| 6) Hillcrest Hospital
140 Burke/Calhoun City Rd.
Calhoun City, MS 38916 | 12) Pontotoc Health Services
Post Office Box 790
Pontotoc, MS 38863-0890 |
| 7) NMMC - Tupelo
830 S. Gloster St.
Tupelo, MS 38801 | 13) BMH - Booneville
100 Hospital St.
Booneville, MS 38829 |

- 14) **BMH - Union County
200 Highway 30, West
New Albany, MS 38652-3197**
- 15) **Webster Health Services
500 Highway 9 South
Eupora, MS 39744**
- 16) **Tippah County Hospital
Post Office Box 499
Ripley, MS 38663-0499
(601) 837-9221 or 2143**
- 17) **Tishomingo Health Services
Post Office Box 860
Iuka, MS 38852-0860
(601) 423-6051**
- 18) **Monroe County Hospital
Post Office Box 747
Aberdeen, MS 39730**

Section 3. Voting Rights. In all meetings of members, each member hospital shall be entitled to one (1) vote. Each member hospital may be represented by its director(s) serving on the board of directors (as hereinafter designate) or by any other individual designated by the member hospital.

Section 4. Resignation. Any member hospital may resign from any position with the corporation by submitting a written notice of resignation to the President through the Secretary.

ARTICLE IV MEETINGS OF MEMBERSHIP

Section 1. Annual Meeting. There shall be an annual meeting of member hospitals during the month of November of each year in the principal office of the corporation on such date as is fixed by the board of directors or at such other time and place as shall be so designated. At such annual meeting, the members shall elect a board of directors and transact such other business as may properly be brought before the meeting.

Section 2. Special Meetings. Special meetings of members may be called for any purpose by the chairman of the board, the president or the board of directors, either at their own request or upon written petition by at least five percent of the voting members. Any such request shall state the purpose for which such meeting is called and designate the date, time and place for such special meeting.

Section 3. Notice of Meetings. Written notice of every meeting of the membership stating the place, date and hour of the meeting, shall be given either personally or mailed to each person not less than 10 days nor more than 60 days before the date of the meeting. Attendance at a membership meeting shall constitute a waiver of notice of such meeting and all objections to the place or time of meeting, or the manner in which it has been called or convened, unless a member states at the commencement of said meeting that the attendance of the member at such meeting is for the sole purpose of objecting to the holding of the meeting or the transaction of any business at the meeting.

Section 4. Quorum. Fifty-one percent of the membership present in person or by telephonic, real time video conference or other electronic means of communication shall constitute a quorum for the transaction of business, except as may otherwise be provided by law. If a quorum is not present or represented at any meeting of the membership, the presiding officer shall not attempt to conduct any business and those members present shall be dismissed.

Section 5. Voting. When a quorum is present at any meeting and unless otherwise provided by law, a majority of a member's voting, whether in person or represented by proxy, will be the act of the members.

Section 6. Presiding Officer. The chairman of the board shall preside at the meetings of members. If the chairman is not present then the president of the corporation shall preside; but if the president is not present then a person designated by the board of directors shall preside. The secretary of the corporation shall act as secretary at meetings of members. If the secretary is not present then a person designated by the board of directors shall act as secretary.

Section 7. Representation at Membership Meetings. Each hospital member may be represented by any individual so authorized by the hospital member. Such authorization shall be filed in writing with the corporation. The corporation shall keep at its registered office or principal place of business a record of its members and its members' representatives, giving their names and addresses. The officer who has charge of the membership records of the corporation shall prepare and make, for every meeting of the membership or any adjournment thereof, a complete, alphabetically ordered list of the members entitled to vote at the meeting or any adjournment thereof.

Section 8. Action by Consent. Any action required or permitted to be taken at any meeting of the members may be taken without a meeting if a written consent to such action is signed by all members through their duly authorized representative and such written consent is filed with the minutes of its proceedings.

ARTICLE V BOARD OF DIRECTORS

Section 1. General Powers. The board of directors shall be the governing body of the corporation and shall manage, direct and exercise all powers of the corporation and do all acts and things not prohibited by law, by the articles of incorporation or by these bylaws.

Section 2. Number, Selection and Term. The initial number of directors shall be 36, but the board of directors may increase or decrease the number of directors without amending the bylaws. The initial board of directors shall consist of one medical representative and one administration representative elected from each member hospital located within the Region. Thereafter, each member hospital in the EMS Region

shall be entitled to elect two members of the board of directors, one must be a medical representative and the other an administration representative. Membership on the board of directors shall be individual to the person elected thereto and no director shall have any power of substitution, or of delegation of authority, with respect to membership on the board. In the event that a director elected by a member hospital is removed at the direction of said member hospital, the member shall be entitled to designate a replacement director. Each director shall serve until such time as a replacement director is designated in writing by the member hospital, which the director represents.

Section 3. Removal or Resignation. Any director may be removed by the electing member hospital or by the affirmative vote of three-fourths of the directors in office. Any director may resign by giving written notice to the chairman of the board, the secretary and the electing member hospital. Unless otherwise specified in such notice, the resignation shall take effect upon delivery to the designated officers. A resignation need not be accepted in order to become effective.

Section 4. Vacancies. Any vacancy in the board of directors shall be filled by the hospital member whose director created the vacancy.

ARTICLE VI MEETING OF DIRECTORS

Section 1. Annual Meeting. The annual meeting of the board of directors shall be held immediately following the annual meeting of the membership for the purpose of election of officers. Written notice of the time and place of the annual meeting shall be given to each director by personal delivery or by mail, phone or facsimile at least two (2) days before the meeting.

Section 2. Regular Meetings. Additional regular meetings of the board of directors may be held at such time and place as may be established by the board of directors. Written notice of the date, time and place of the meeting shall be given to each director by personal delivery or by mail, phone or facsimile at least two (2) days before the meeting.

Section 3. Special Meetings. Special meetings of the board of directors may be called by the chairman of the board or by the president. Special meetings shall be called by the president or by the secretary on written request of a majority of the board of directors. The secretary shall give written notice to each director of the date, time and place of the special

meetings at least two days before the date of said meeting by personal delivery, mail, phone or facsimile.

Section 4. Quorum. At all meetings of the board of directors, fifty-one percent of the directors shall constitute a quorum of the transaction of business. The act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the board of directors, except as may be otherwise specifically provided by law or by these bylaws. If quorum shall not be present at the meeting of the board, the directors present shall not attempt to conduct any business and the presiding officer shall dismiss those directors present.

Section 5. Presiding Officer. The president shall preside at all meetings of the board of directors. If the president is not present, then the vice president shall preside; if the president and vice president are not present, then a person designated by the board of directors shall preside. The secretary of the corporation shall act as secretary of the meeting. If the secretary is not present, a person chosen by the board of directors shall act as secretary.

Section 6. Action by Consent. Any action required or permitted to be taken at any meeting of the board of directors may be taken without a meeting if a written consent to such action is signed by all members of the board of directors and such written consent is filed with the minutes of its proceedings.

Section 7. Meetings by Telephone or Other Similar Communications Equipment. The board of directors may participate in a meeting by means of a conference telephone, real time video conference or other similar communications equipment by means of which all directors participating in the meeting can hear each other, and participate in such a meeting shall constitute presence in person by such director at such meeting.

ARTICLE VII OFFICERS

Section 1. Number. The officers of the corporation shall be a President, a Vice-President, and a Secretary/Treasurer each of whom shall be elected by the directors. Such other officers and assistant officers as may be deemed necessary may be elected or appointed by the directors.

Section 2. Election and Term of Office. The officers of the corporation to be elected by the directors shall be elected annually at the first meeting of the directors held after each annual meeting of the directors. Each officer shall hold office until his/her successor shall have been duly elected

and shall have qualified or until his/her death or until he/she shall resign or shall have been removed in the manner hereinafter provided.

Section III. Removal. Any officer elected or appointed by the directors may be removed by two-thirds (2/3) of the directors whenever in their judgment the best interests of the corporation would be served thereby, or upon the removal of appointment to the board of directors of the officer by the hospital or the EMS provider.

Section IV. Vacancies. A vacancy in any office because of death, resignation, removal, disqualification or otherwise, may be filled by the directors for the unexpired portion of the term.

Section V. President. The president shall be the principal executive officer of the corporation, and subject to the control of the directors, shall in general supervise and control all of the business and affairs of the corporation. He/she shall, when present, preside at all meetings of the directors and of the directors. He/she may sign, with the Secretary or any other proper officer of the corporation thereunto authorized by the directors, any documents, contracts or other instruments which the directors have authorized to be executed, except in cases where the signing and execution thereof shall be expressly delegated by the directors or by these bylaws to some other officer or agent of the corporation, or shall be required by law to be otherwise signed or executed, and in general shall perform all duties incident to the office of the president and such other duties as may be prescribed by the directors from time to time.

Section VI. Vice-President. In the absence of the president or in the event of his/her death, inability or refusal to act, the Vice-President shall perform all the duties of the president, and when so acting, shall have all the powers of and be subject to all the restrictions upon the president. The Vice-President shall perform such other duties as from time to time may be assigned to him/her by the President or by the directors.

Section VII. Secretary. The secretary shall keep the minutes of the directors' and directors' meetings in one or more books provided for that purpose, see that all notices are duly given in accordance with the provisions of these bylaws or as required, be custodian of the corporate records and of the seal of the corporation and keep a register of the post office address of each director which shall be furnished to the secretary by such director, have general charge of the voting lists of the corporation and in general perform all duties incident to the office of secretary and such other duties as from time to time may be assigned to him/her by the president or by the directors.

Section 8. Treasurer. If required by the directors, the treasurer shall give a bond for the faithful discharge of his/her duties in such sum and with such surety or sureties as the directors shall determine. He/she shall have charge and custody of and be responsible for all funds and securities of the corporation; receive and give receipts for moneys due and payable to the corporation from any source whatsoever, and deposit all such moneys in the name of the corporation in such banks, trust companies or other depositories as shall be selected in accordance with these bylaws and in general perform all of the duties incident to the office of treasurer and such other duties as from time to time maybe assigned to him/her by the president or by the directors.

ARTICLE VIII COMMITTEES

Section 1. Executive Committee. The board of directors annually shall, by resolution adopted by a majority of the whole board, appoint from its membership an executive committee of at least five (5) but not more than seven(7) which shall be composed of the president, a director from North Mississippi Health Services system, a director from Baptist Memorial Hospital system and at least three members from hospitals or systems not affiliated with North Mississippi Health Services or Baptist Memorial Hospital. The executive committee shall serve until the next annual meeting of the members.

- (a) Power of Executive Committee. During the intervals between the meetings of the board of directors, the executive committee shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation to the extent permitted by law. The executive committee shall not (1) increase or decrease the number of directors, (2) dispose of the corporation's assets upon dissolution of the corporation, (3) amend the certificate of incorporation, (4) alter, amend and repeal the by laws of the corporation, or (5) adopt an agreement of merger or consolidation of the corporation. All actions of the Executive Committee shall be reported to the Board of Directors at its next regular meeting.
- (b) Presiding Officer. The president shall preside at meetings of the executive committee. If the president is not present, then a member of the executive committee chosen by a majority of the members of the executive committee present shall preside. The secretary of the corporation shall act as secretary at meetings of the executive committee. If the secretary is not present then another member chosen by the executive committee shall act as secretary of the executive committee.

- (c) Vacancies in Executive Committee. Vacancies in the executive committees shall be filled by the board of directors, but in the interim between meetings of the board of directors such vacancies may be filled by the executive committee.

Section 2. Other Committees. The board of directors, by resolution, may designate from among its directors an executive committee and other committees as needed, each consisting of at least two (2) directors. Each such committee shall serve at the pleasure of the board, and shall have and may exercise all the powers and authority as granted by the board of directors to the extent permitted by law. No committee shall have the power to: (1) increase or decrease the number of directors; (2) dispose of the corporation's assets upon dissolution of the corporation; (3) amend the certificate of incorporation; (4) alter, amend or repeal the bylaws of the corporation; or (5) adopt an agreement of merger or consolidation of the corporation. All actions of the committee(s) shall be reported to the board of directors at its next regular meeting,

Section 3. Vacancies. Vacancies in the committees shall be filled by the board of directors, but in the interim between meeting of the board of directors such vacancies may be filled by the committee.

Section 4. Meetings of Committees. Except as otherwise provided in these bylaws, each committee shall establish its own rules of procedure and shall meet at such time and place as shall be established by the committee. Each committee shall keep minutes of its meetings. A majority of the members of any committee shall constitute a quorum. The affirmative vote of a majority of the members of the whole committee shall be necessary for the passage of any resolution, or the taking of any action.

ARTICLE IX MEETINGS OF COMMITTEES

Section 1. Procedure and Meetings. Except as otherwise provided in these bylaws, each committee shall establish its own rules of procedure and shall meet at such time and place as shall be established by the committee. Each committee shall keep minutes of its meetings.

Section 2. Quorum. A majority of the members of any committee shall constitute a quorum. The affirmative vote of a majority of the members of the whole committee shall be necessary for the passage of any resolution, or the taking of any action.

Section 3. Action by Consent. Any action required or permitted to be taken at any meeting of any committee may be taken without a meeting if

a written consent to such action is signed by all members of the committee and such written consent is filed with the minutes of its proceedings.

Section 4. Meetings by Telephone or Video or Other Similar Communications.

The members of any committees may participate in a meeting of such committee by means of conference telephone, real time video conference or similar communication equipment by means of which all persons participating in such meeting can hear each other, and participation in such a meeting shall constitute presence in person by any such committee member at such meeting.

ARTICLE X
NOTICES

Section 1. Form and Delivery. Whenever notice is required to be given to any director or member hospital it may be given in writing mailed to the director or member hospital at his/its address as it appears on the books of the corporation, unless otherwise specifically provided by law or these bylaws. Notice given by mail shall be deemed to be given when they are deposited in the United States mail, postage prepaid. Notice to a director may also be given by personally delivering written notice to the director or by telephoning notice to the director or by faxing such notice to the director at his address as it appears on the records of the corporation. Notices given by facsimile shall be deemed to be given when transmitted.

Section 2. Waiver. Whenever any notice is required to be given a written waiver thereof signed by the person entitled to said notice, whether before or after the time stated therein, shall be deemed to be equivalent to such notice. Any member hospital who attends a meeting of members in person by its duly authorized representative or is represented in such meeting by proxy, without protesting at the commencement of the meeting the lack of notice thereof or any director who attends a meeting of the board of directors or any committee without protesting at the commencement of the meeting the lack of notice, shall be conclusively deemed to have waived notice of such meeting.

ARTICLE XI
DISSOLUTION

Section 1. Disposition of Assets. Upon the dissolution of the corporation, the board of directors shall, after paying or making provision for the payment of all of the liabilities of the corporation, dispose of all the assets of the corporation as provided in the Certificate of Incorporation and in Article II of these bylaws.

ARTICLE XII FISCAL YEAR

The fiscal year of the corporation shall begin on the first day of October and end on the last day of September of the following year.

ARTICLE XIII FINANCE

Section 1. Authorized Signatories. Except as the board of directors may generally or in particular cases authorize the execution thereof in some other matter, all checks, drafts, and other instruments for the payment of money and all instruments of transfer of securities shall be co-signed in the name and on behalf of the corporation by the president and treasurer.

Section 2. Deposits. All funds of the corporation shall be deposited from time to time to the credit of the corporation in such banks, trust companies, or other depositories as the board of directors may select.

Section 3. Gifts. The board of directors may accept on behalf of the corporation, any contributions, gifts, bequests, or devices for the general purposes or for any special purposes of the corporation.

Section 4. Annual Financial Statements. Not later than three months after the close of each fiscal year, the corporation shall cause to be prepared by a CPA, as follows:

- a. A balance sheet showing in reasonable detail the financial condition of the corporation as of the close of the fiscal year.
- b. A source and application of funds statement showing the results of its operation during its fiscal year.
- c. An audit of financial records of the corporation using generally accepted auditing standards.

ARTICLE XIV INDEMNIFICATION

The corporation shall indemnify and may obtain insurance with respect to, each person who is or shall be a director, officer, agent, or employee of the corporation from and against loss, damage, or expense on account of any action, suite, or proceeding brought or threatened against such person by reason of his being or having been a director, officer, agent, or employee of the corporation, to the fullest extent permitted by law, including, but not limited to, the provisions of Miss. Code Ann. Section 79-11-281 (1972).

ARTICLES XV
AMENDMENT

The board of directors shall have authority to alter, amend or repeat these bylaws and to adopt new bylaws by an affirmative vote of a majority of the whole board; provided however, the board of directors cannot amend any provision in a manner which would adversely affect the corporation's exemption under Section 501(c)(3) of the Internal Revenue Code.

DATED, this the _____ day of March, 2000.

NORTH MISSISSIPPI TRAUMA SYSTEM, INC.

BY: _____
JOHN B. DAWSON, PRESIDENT

BY: _____
CHARLES NASEM, SECRETARY

PLAN DESCRIPTION AND OPERATIONS

This Section describes the current system for victims of medical trauma and the desired result of improvements to the current system.

I. Current System

The North Mississippi Trauma System, Inc. is made up of eighteen counties in the extreme northeastern corner of Mississippi. The region is vastly rural with an estimated population of 499,685.

The current system is designed around the local EMS provider transporting the trauma patient to the nearest local hospital with an emergency room. At present there are two BLS, one Intermediate, and fourteen ALS Emergency Medical Providers in the Region. North Mississippi Medical Center also operates an air medical service. There are seventeen hospitals in the Region which operate an emergency room. All seventeen of those facilities participate in the North Mississippi Trauma System, Inc. Two counties in the Region do not have a medical facility, Benton and Itawamba.

Each hospital has its own method of providing care to the trauma patient however all the participating hospitals provide trauma care consistent with their level of certification. This includes staffing and call back of medical and other clinical staff. The patient is stabilized then transferred if necessary. Most transfers in the region are directed to The Med in Memphis, TN, UMC in Jackson, MS, North Mississippi Medical Center in Tupelo, MS, or BMH-Golden Triangle in Columbus, MS.

II. Plan Objectives

The goal of the plan is to develop a trauma system for the North Mississippi Trauma System, Inc. Specific objectives to achieve this goal include:

1. Develop a program directed to the public for the purpose of preventing traumatic injuries.

2. Establish a standardized response system to trauma that will enable the providers to improve clinical care and to deliver the patient to the appropriate level care in as little time as possible.
 - (a) Standardization of pre-hospital care procedures and protocols
 - (b) Standardization of hospital responses to the trauma patient
 - (c) Coordination among EMS providers and hospitals to deliver the patient to the nearest most appropriate facility
3. Provide educational opportunities for physicians, clinical staff, pre-hospital providers, and the public regarding trauma care.
4. Development of a Performance Improvement Plan to continually evaluate the system.
5. Maintain commitment from the participating hospitals and physicians to the system through representation on the Region's Board of Directors and participation in Regional Trauma Programs
6. Encourage the region's hospitals to incorporate the trauma patient's rehabilitation in to their plan of care. The Region shall also encourage the providers of rehabilitative medicine to develop programs geared to the patients of trauma.
7. Participation, upon request, in any State sponsored research projects relating to trauma and trauma care.

III. Participant Requirements

All participants must meet the requirements established by Mississippi State Department of Health to operate in the State of Mississippi. Additionally, any participant must meet the requirements for the *Mississippi Trauma Care System Regulations* as established by the MSDOH and the requirements set forth by any accrediting agencies which the facility subscribes to such as JCAHO.

The process of entering the North Mississippi Trauma System, Inc. consists of a letter of intent to the Region also with the MSDOH Application for Trauma Center Designation. An inspection will be scheduled upon acceptance of the application from the MSDOH.

Surveyors will consist of representatives from the MSDOH. (*MTCSR*, XV) A final decision regarding acceptance will be made pending survey results.

All employees, physicians, and volunteers of the participants must be licensed to practice, where a license or certification is required, in the State of Mississippi.

IV. Revised System

The current system would be improved to prevent traumatic incidents and decreased mortality and disability resultant of traumatic incidents. The hospitals of the region will still provide stabilization and treatment appropriate for their level and transfer to the appropriate level of care, as the patient's condition requires.

The elements of the revised system would include the pre-hospital providers, hospitals, and the educators of trauma prevention and care. Each of the following elements is discussed in relation to the appropriate Plan Objective (s).

1. Pre-hospital providers

The pre-hospital providers include ground and air based ambulance services, and those fire departments that utilize First Responders. The system would enable these services to arrive on scene as quickly as possible to render care and to provide the necessary information to the local receiving hospital.

Objective: Establish a standardized response system to trauma that will enable the providers to improve clinical care and to deliver the patient to the appropriate level care in as little time as possible.

The Region recognizes that each provider of ambulance services has individualized protocols regarding trauma care, on and off line medical control and communication systems. The Region presumes that in meeting the State requirements to operate, the ambulance provider meets the State expectations regarding the Mississippi Trauma Care System. The Region shall monitor each ambulance service through its PI Plan to

determine the efficacy of each provider's care to trauma patients.

Each ambulance provider is to attempt in good faith to negotiate reciprocity agreements with the services located at and within their common geographic borders to provide for backup in the event of over utilization.

Objective: Provide for the education of physicians, clinical staff and the public regarding trauma care.

Each EMS service must employ individuals that are licensed to perform their level of care. This Region accepts their current standards set forth by the MSDOH as sufficient. The Region shall work with the MSDOH to assist with the dissemination of educational information regarding trauma care to these individuals.

The region shall work the EMS agencies and local governments to provide trauma care instruction to their First Responders where employed. All pre-hospital providers would be educated regarding the decision to alert the local hospitals to a potential trauma system patient.

2. Hospitals

The North Mississippi Trauma System, Inc. recognizes the State's standards as being appropriate for the region's needs.

Objective: Establish a standardized response system to trauma that will enable the providers to improve clinical care and to deliver the patient to the appropriate level care in as little time as possible.

Each hospital would have a standardized response to a trauma patient as specified in their trauma program. Each participating hospital is to develop a trauma plan consistent with their level of designation and would meet all the State's requirements regarding their level designation. The Region shall work with the State to ensure each facility operates according to their plan.

The North Mississippi Trauma System, Inc. recognizes that the existing Level III and Level IV facilities may have certain clinical specialties unique to the region. Trauma patients requiring these services, but not on a Level I or Level II capacity may be sent directly to the applicable facility upon direction from the on-line trauma medical control physician. All the region's participating hospitals are to have transfer agreements as outlined in the *Mississippi Trauma Care System Regulations*.

Objective: Maintain commitment from the participating hospitals and physicians to the system through representation on the Region's Board of Directors.

Each participating facility shall have the opportunity to express its views through its Board of Directors representation. The Mississippi Trauma Care System helps ensure commitment through reimbursement for uncompensated trauma care. The Regional Board of Directors is represented on the State level through the Mississippi Trauma Advisory Committee.

Objective: Encourage the region's hospitals to incorporate the trauma patient's rehabilitation into their plan of care. The Region shall also encourage the providers of rehabilitative medicine to develop programs geared to the patients of trauma.

The region shall encourage its hospitals to utilize other facilities that have rehabilitative therapies and to consider reimbursement for the purchase of capital equipment used for rehabilitation. The region shall encourage the providers of rehabilitative therapies to obtain continuing education related to trauma.

3. Education and Research

**Objective: Provide for the education of physicians, clinical staff and the public regarding trauma care and
Develop a program directed to the public for the purpose of preventing traumatic injuries.**

The North Mississippi Trauma System, Inc. would help individual facilities establish and support educational programs regarding trauma care for their physicians, nursing and pre-hospitals personnel. The Region would also support each facility with the provision of trauma prevention programs directed to the public. Support for these programs will be in the form of communications, research, and collaboration with other Regions or State level agencies. The Region may, at its own discretion, directly provide preventative education to the public.

Objective: Participation, upon request, in any State sponsored research projects relating to trauma and trauma care.

The North Mississippi Trauma System, Inc. shall participate to the best of its capabilities and upon request to any state level research projects related to trauma care. The Region shall initiate any research projects in accordance with its Performance Improvement Plan.

Objective: Development of a Performance Improvement Plan to continually evaluate the system.

The Region shall develop and maintain a Performance Improvement Plan that meets the required elements set forth by the Mississippi Trauma Care System. (*MTCSR*, XIV)

REGIONAL TRANSFER POLICY GUIDELINES

GOALS

1. Establish a consistent mechanism to transport patients to the most appropriate facility available in a timely manner.
2. To insure all relevant data is communicated to the accepting facility.
3. To promote an orderly and timely transfer of trauma patients incorporating EMS personnel, ED staff, consulting services and accepting facilities.

PROCEDURE

1. Physician at the transferring facility will determine the need for transfer and contact the most appropriate facility available for transfer of the trauma patient.
2. The physician at the transferring facility will obtain an accepting physician.
3. The transferring physician will give the accepting physician a detailed report including:
 - A. mechanism of injury
 - B. initial VS and GCS
 - C. identified injuries
 - D. treatments
 - E. results of labs and x-rays
 - F. level of stabilization
 - G. current VS and GCS
4. The transferring physician and the accepting physician will collaborate and determine the most appropriate mode of transportation for the patient and determine an ETA to the accepting facility, which will be documented on the transfer form.
5. The accepting facility will instruct the transferring facility as to any treatments or procedures that must be done prior to transfer or enroute.

6. The transferring facility will complete the accepting facilities requests to the best of their capability based on resources.
7. The transferring facility will send with the patient, fax, or call a verbal report, as soon as available, all pertinent patient data.
8. The RN at the transferring facility will call report to the RN at the accepting facility and document the name, title, and time of the report on the patient record,
9. The transfer team will call an updated report to the accepting facility by phone or radio when they are approximately 10 minutes from the accepting facility.
10. The transfer will occur in accordance with protocols as set forth in the Regional Policies.
11. A written inventory of the patient's personal property will be completed and witnessed by a licensed medical person. Every effort will be made to give personal property to a family member and have them sign for the property. Both the transferring and receiving facilities will have a copy of the written inventory.
12. The accepting facility will call an update to the TNC at the transferring facility within 48 hours.

DOCUMENTATION TO BE SENT WITH THE PATIENT

1. Name
2. Address
3. Phone Number
4. Age, date of birth
5. Social Security Number
6. Next of Kin name, address, and phone number
7. Insurance Information
8. Employer
9. Medical History, allergies, current home medications
10. Condition on admission to include field VS and GCS, and ER VS and GCS
11. Treatments, MD H&P, Nursing Assessment, Medications Administered
12. Lab and radiological findings including films if possible.
13. Fluids by type and volume.

14. Name, address and phone of transferring MD and TNC at transferring facility
15. Accepting MD name
16. Person at receiving facility whom has been contacted.
17. Documentation of family notification, who was notified and when they were notified.

MEDICAL ORGANIZATION AND MANAGEMENT

The Region's Trauma Medical Director coordinates regional medical direction. The Trauma Medical Director's role is to ensure medical accountability, act as a trauma system advocate, and provide for medical credibility throughout system development. The Regional Trauma Medical Director chairs the Regional Medical Control/PI Committee and serves as the offline trauma medical control physician.

The Trauma Medical Director is assisted by the Medical Control/PI Committee, whose role is to develop, revise, and monitor all operating protocols and procedures by physicians, including reviewing pre-hospital reports for compliance with pre-established procedures. The Medical Control component will engage in an ongoing process of integration of the trauma medical care policies and the EMS system, overall evaluation of the trauma system and recommendation of changes. This committee will conduct continuous performance improvement geared toward improving the final outcome of injured patients. This will be dependent upon effective monitoring, integration and evaluation of all components of the patient's care. Standards will be established for pre-hospital personnel who will be held accountable to the trauma medical direction system.

The on-duty physician in the emergency room receiving the patient or directing bypass to another Trauma Center will conduct online medical control. The Regional Trauma Medical Director will ensure competence in regional protocols for all on-line medical control physicians.

Medical Control procedures will be established by the Medical Control/PI Committee.

INCLUSIVE TRAUMA SYSTEM DESIGN

Ours is one of a seven-system network, which addresses trauma management throughout the State of Mississippi. Our goal is an integrated network of providers, educated and certified to optimize and continually improve the outcomes and efficiency of the Region's trauma care. Providers include hospitals, EMS, and physicians, coordinating efforts to train and treat trauma patients as quickly, effectively, and efficiently as possible.

North Mississippi Trauma System, Inc. is composed of the following facilities:

LEVEL II

BMH-Golden Triangle	Columbus, MS
North Mississippi Medical Center	Tupelo, MS

LEVEL III

BMH-North Mississippi	Oxford, MS
Clay County Medical Center	West Point, MS
Gilmore Memorial Hospital	Amory, MS

LEVEL IV

BMH-Booneville	Booneville, MS
BMH-Union County	New Albany, MS
Calhoun Health Services	Calhoun City, MS
Magnolia Regional Health Center	Corinth, MS
Pioneer Health Services	Aberdeen, MS
Pontotoc Health Services	Pontotoc, MS
Tippah County Hospital	Ripley, MS
Tishomingo Health Services	Iuka, MS
Webster Health Services	Eupora, MS

These facilities have been either fully or partially designated by the MSDOH as a Trauma Center.

Patients are triaged from the field under guidelines established by the Region to the most appropriate facility available, or are stabilized at the nearest facility and transferred to an appropriate facility under the direction of the Regional Trauma Medical Director. Those guidelines are referenced on page X-22. Most patients in the North Mississippi Trauma System will be closer to a Level II facility within the region; however, exceptions can be made to transport a patient to a facility outside the region under the direction of the Regional Trauma Medical Director. All state designated trauma centers in the Region will serve both adult and pediatric patient populations for initial stabilization to the best of their resource capability and transfer when appropriate.

All facilities participating in the Region will participate in internal PI programs. The region will also perform PI activities in accordance with Mississippi Trauma Care System Regulations.

The roles of providers are described in patient chronological order starting with EMS and ending with rehabilitation.

EMS and First Responders - The role of the EMS and First Responder are to render first aid and appropriate ALS care until the patient is delivered to the nearest appropriate facility. These providers also activate the system by alerting the receiving facility to a trauma patient through their medical control.

Receiving Hospitals - Receiving hospitals are to render care appropriate to their level of certification. Patients requiring care beyond the capabilities of the hospital are to be transferred as soon as feasible through the best available means as determined by the facility's trauma director or trauma medical control in their absence. Receiving hospitals are to utilize the appropriate transfer procedures when transferring a patient to another facility.

Rehabilitation - The region shall encourage its hospitals to utilize other facilities that have rehabilitative therapies should they not have their own and to consider reimbursement for the purchase of capital equipment used for rehabilitation. The region shall encourage the providers of rehabilitative therapies to obtain continuing education related to trauma.

Medical Professionals and Educators - Medical professionals are to provide care within the scope of their licenses or registries. Educators are to provide information to the professionals and general public in a manner that will achieve the objective relating to education.

DOCUMENTATION OF PARTICIPATION OF THE HOSPITALS IN THE REGION

Hospitals desiring to participate in the Trauma Region have submitted letters of intent to participate. These letters have been endorsed by hospital administration and the medical staff. Copies of the letters of participation from each of the participating facilities within the Region are included in this section.

DOCUMENTATION OF INTERFACILITY TRANSFER AGREEMENTS

The North Mississippi Trauma System, Inc. Board of Directors had adopted the following three model transfer agreements for the participating facilities in the Region to use as required by the Mississippi Trauma Care System Regulations.

Participating facilities will monitor the effectiveness of transfer agreements and will report irregularities to the Region's Medical Control/PI Committee for evaluation.

The Region recommends that each participating facility evaluate their agreements on an ongoing basis, and renew them as needed.

OPERATIONAL IMPLEMENTATION OF THE POLICIES DEVELOPED

From an operational perspective the Region is charged with injury prevention, public education, workforce resource management, provider education, EMS management, pre-hospital guidelines, communications, promulgation of trauma facility guidelines, standardized interfacility transfer procedures and agreements, data collection and management systems, and ongoing quality assurance and performance improvement evaluation.

The goal of injury prevention will be achieved through public education and legislation. Public education will be necessary to inform the public about the trauma system, its activation and use.

Appropriate management of personnel resources and provision of provider education is required to effectively train and utilize the medical workforce.

Effective EMS management, promulgation of pre-hospital protocols and procedures and communication linkages is necessary in achieving prompt and effective pre-hospital care, from first responders to rescue squads to public and private ambulance services.

Promulgation of trauma facility guidelines, along with standardized transfer procedures and agreements will assure standardization of care in and among treatment facilities.

A well-designed program of data collection and management will provide indicators and feedback for continuing training and education, prevention and public education efforts. The State and Regional Registry data will also enable ongoing evaluation of clinical, operational and administrative components, for continuing performance improvement.

SYSTEM ORGANIZATION & MANAGEMENT

The Mississippi Trauma System has been established by the Mississippi Legislature with the enactment of Mississippi Code Annotated, Section 41-59-1 et. seq. The Mississippi State Department of Health, Office of Emergency Medical Services, is established as the lead agency for administration of the Mississippi Trauma System. To govern the administration of the system, the OEMS has promulgated the *Mississippi Trauma Care System Regulations*. The state of Mississippi has been divided into geographic regions, each of which is given the responsibility for developing the Trauma System from within its own region.

North Mississippi Trauma System, Inc. is comprised of the following counties: Benton, Tippah, Alcorn, Tishomingo, Prentiss, Lafayette, Union, Pontotoc, Lee, Itawamba, Calhoun, Chickasaw, Monroe, Webster, Clay, Choctaw, Oktibbeha, and Lowndes. Benton and Itawamba counties do not have medical facilities which operate an emergency room. All other facilities in the remaining counties operate MSDOH designated Trauma Centers and participate in the North Mississippi Trauma System, Inc. with the exception of Trace Regional Hospital in Chickasaw County. Each of the participating facilities is represented on the region's Board of Directors.

The Board of Directors of the North Mississippi Trauma System, Inc. is the governing body for the Region. The Board elected to employ a full-time Regional Director to oversee the day-to-day activities of the Region. Staff promulgate administrative policies and procedures, and oversee development of the Region's Trauma Plan, all of which are presented to the Board for consideration/approval. Committees have been established to develop policies and procedures for Medical Control/PI, TNC/Education, and Executive issues. The Regional Trauma Medical Director oversees the medical activities of the Region.

SYSTEM ORGANIZATION AND MANAGEMENT POLICY

PURPOSE: To provide organizational structure and administrative command and control for the North Mississippi Trauma System, Inc.

POLICY: The North Mississippi Trauma System, Inc. shall develop and maintain operations for the trauma program in the geographic region delegated by the Mississippi State Department of Health.

1. The Region shall incorporate, develop and operate a Board of Directors and Regional Bylaws.
2. The North Mississippi Trauma System, Inc. voting membership shall consist of the geographically eligible hospitals participating in the Mississippi State Trauma Care System. Participating hospitals must be designated as trauma centers by the MSDOH.
3. Additional members may participate on a non-voting status after approval of the Board of Directors.
4. The Board of Directors shall develop and maintain a Trauma Plan in accordance with the requirements established by the *Mississippi Trauma Care System Regulations*.
5. The Board of Directors shall appoint some person or entity that shall have administrative authority over the daily operations of the North Mississippi Trauma System, Inc.
6. Voting and non-voting members shall participate in the North Mississippi Trauma System, Inc. as specified in the Board's Bylaws and other policies.
7. Each voting member shall develop and maintain a trauma center designated by the Mississippi State Department of Health.

8. All information submitted from voting members and non-voting members to the North Mississippi Trauma System, Inc. shall be considered proprietary. Member organizations shall not use Region's proprietary information for individual organizational gain.

TRAUMA CARE COORDINATION WITHIN THE REGION

Trauma care within the Region is coordinated according to medical policies established by the Region's Trauma Medical Director, and administrative policies promulgated by the Board of Directors.

The inclusive approach of the Trauma System is intended to insure that all trauma care resources are identified and placed at the disposal of the system. Each patient is then matched, according to his medical needs, with the appropriate resources. The system thus depends upon careful evaluation of all Regional resources, sound triage and transport procedures to ensure that this important match between the patient and the appropriate resources takes place, and that it takes place in a timely fashion.

Thus, coordination of trauma care depends heavily upon the accurate and reliable transmission of information. Resources must be accurately inventoried and reported to the Region. Patient triage, treatment, and transport information must be obtained expeditiously and transmitted to the local trauma center, so that an evaluation can be made of whether the patient may be cared for locally or whether he will require transfer to a higher level of care. This information must be transmitted promptly to the receiving facility to further evaluate the appropriateness of transfer and the availability of resources at the receiving facility. Treatment and outcome information must then be reported to the Regional Trauma Registry and to the State Trauma Registry for evaluation and performance improvement processes. Feedback must then return to the involved facilities in order that their performance can be evaluated, and possible deviations or deficiencies addressed.

This coordination of trauma care contemplates a multi-faceted approach, from administrative procedures promulgated by Region staff directed by the Executive Committee, to medical procedures and protocols and performance improvement procedures set forth by the Regional Trauma Medical Director, in consultation with the Medical Control/PI Committee, to training and educational programs set forth by the Educational Committee.

Routine coordination of administrative activities will be through the Regional Director, under the direction of the Board of Directors. The Regional Trauma Medical Director is the coordinator of trauma care rendered within the Region. Urgent matters which arise shall be referred to the Regional Trauma Medical Director or his authorized Regional Trauma Medical Control designee.

INTRA-REGIONAL COORDINATION POLICY

PURPOSE: To establish and maintain cooperation among the agencies participating in the regional trauma plan.

POLICY: The North Mississippi Trauma System, Inc. shall develop and maintain a system designed to facilitate cooperation among the agencies participating in the regional plan.

1. The system shall provide for regional trauma medical control to include criteria for activation of the trauma team. Regional trauma medical control shall be in the form of cooperation individual participant hospitals. Regional medical control shall provide for:
 - a. criteria for bypass
 - b. criteria determining a hospital's level of trauma team activation
 - c. survey to determine capabilities of region's ability to provide trauma care
2. Hospitals shall develop and provide to the North Mississippi Trauma System, Inc. their individual regional trauma plans, team activation procedures, and transfer agreements.
3. All agencies shall report to the North Mississippi Trauma System, Inc. their operational capabilities regarding trauma care. This is to include, but is not limited to facilities, medical specialties, and communication capabilities.

TRAUMA CARE COORDINATION INTER-REGION POLICY

PURPOSE: The purpose of this policy is to provide the mechanism for coordinating trauma care between the North Mississippi Trauma System, Inc. and other trauma regions located in Mississippi.

POLICY: The North Mississippi Trauma System, Inc. will facilitate the establishment and maintenance of agreements between the participating hospitals and EMS agencies of the North Trauma Care Region and those participating facilities and EMS agencies of neighboring and other applicable regions.

1. All participating hospitals shall establish and maintain transfer agreements as set forth in the *Mississippi Trauma Care System Regulations*.
2. Each EMS provider, to include hospital-based providers, shall attempt in good faith to establish mutual aid agreements with all adjacent EMS providers.
3. The North Mississippi Trauma System, Inc. shall maintain contact with neighboring Trauma Regions and the MSDOH to monitor the status of and changes to the Mississippi Trauma Care System and its Regions. The Region's Trauma Coordinator shall meet bimonthly with the other Regional Coordinators or equivalent representatives. The North Mississippi Trauma System, Inc. shall incorporate Mississippi Trauma Care System changes and consider changes in other region's plans in to the North Mississippi Trauma System, Inc. Performance Improvement Plan.

DATA COLLECTION AND MANAGEMENT

The North Mississippi Trauma System, Inc. has implemented the Mississippi State Department of Health's standardized trauma data collection instruments. All data collection instruments utilized by the Region shall include the collection of both pre-hospital and hospital patient care data, and shall be integrated into both the Region's and the MSDOH's data management systems. All Trauma Centers within the Region shall participate in the Trauma Care Region data collection effort in accordance with the Region's policies and procedures. (*MTCSR*, SVII.)

The information collected by the Region on a routine bases will be based on the data collection points requested by the various committees of the Region. Any request from committees or outside sources for Regional Trauma Registry Data Reports must be submitted to the Regional Director in writing prior to the release of the information.

Currently, Trauma Registry data is exported from participating hospitals to the Region biannually. The Region exports data to the MSDOH every six months as required by the MSDOH.

DATA COLLECTION AND MANAGEMENT POLICY

PURPOSE: To provide a framework for collecting, recording, and utilizing data for purposes of trending, root cause analysis, and performance improvement.

POLICY: The North Mississippi Trauma System, Inc. shall collect and report all necessary data as required by the MSDOH. The Region shall also provide regular reports to the participating hospitals.

1. All participating facilities shall report data and trending reports to the North Mississippi Trauma System, Inc. on a biannual basis.
2. The North Mississippi Trauma System, Inc. shall provide an annual report to the participating hospitals and to the MSDOH as necessary.
3. Data collected shall be used for performance improvement and system evaluation.

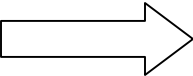
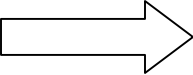
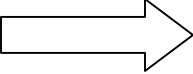
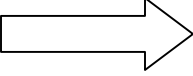
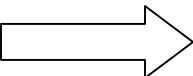
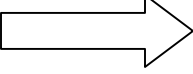
COORDINATION OF TRANSFERS AND TRANSPORTATION OF TRAUMA PATIENTS POLICY

PURPOSE: The purpose of this is to provide guidance regarding the transfer and transportation of trauma patients.

POLICY: Trauma centers and EMS agencies shall cooperate to effectively transport a trauma patient to the appropriate trauma center.

1. The regional trauma system shall be activated through current methodology to include 911, *HP, or direct phone contact with a hospital.
2. Local ambulance provider (s) shall be dispatched to the scene under the authority of the provider's medical control.
3. On-line Medical control shall direct the ambulance provider (s) to the nearest appropriate trauma center and communicate any necessary information to the receiving trauma center if it is a different facility than the local receiving hospital.
4. Trauma centers shall activate their response mechanism and facilitate transfers (if needed) to the nearest appropriate higher level facility. The on-line medical control physician or transferring physician and the receiving physician will determine the mode of transport (air or ground).

SUGGESTED GUIDELINES FOR INTERFACILITY TRANSFER

<u>CENTRAL NERVOUS SYSTEM</u>		HEAD INJURY <ul style="list-style-type: none">▪ Penetrating injury▪ Depressed skull fracture▪ Open injury▪ CSF leak▪ GCS 13 or less▪ Deterioration of GCS of 2 or more points▪ Lateralizing signs <u>SPINAL CORD INJURY</u>
<u>CHEST</u>		<ul style="list-style-type: none">▪ Wide superior mediastinum▪ Major chest wall injury▪ Cardiac injury▪ Patients who may require protracted ventilation
<u>PELVIS/ABDOMEN</u>		<ul style="list-style-type: none">▪ Pelvic ring disruption with shock, more than 5 units of blood transfused▪ Evidence of continued hemorrhage and compound pelvic injury or pelvic visceral injury▪ Suspected intra-abdominal hemorrhage or organ injury
<u>MUSCULOSKELETAL SYSTEM</u>		<ul style="list-style-type: none">▪ Fracture dislocation with loss of pulses▪ Open long bone fractures▪ Extremity ischemia▪ 2 or more long bone fractures
<u>MULTIPLE SYSTEM INJURY</u>		<ul style="list-style-type: none">▪ Severe face injury with head injury▪ Chest injury▪ Abdominal injury with face injury▪ Burns with face injury
SECONDARY DETERIORATION OF TRAUMA PATIENT		<ul style="list-style-type: none">▪ Patients requiring mechanical ventilation▪ Sepsis▪ Single or multiple system organ failure▪ Osteomyelitis

INTEGRATION OF PEDIATRIC HOSPITALS

More children die from injury than from all other causes combined. The societal impact of intentional and unintentional injury is staggering, and the effect of pediatric injury in terms of lost human potential, cost to society, and impact on families is especially overwhelming.

Effective care of the injured child requires an inclusive approach which recognizes injury as a major pediatric health problem, identifies effective strategies for prevention, improves systems of emergency medical care for children, and provides the most appropriate care available. Injured children require special resources which should be available at a trauma center dedicated to the care of injured children. However, because of the limited number and geographic distribution of children's hospitals, all injured pediatric patients cannot be cared for in these institutions. Therefore, other institutions must be available to provide this resource to the community and trauma care system.

Certain components must be present in any facility which cares for injured children. The traumatized pediatric patient has special requirements that go beyond the resources required for an adult trauma center. All adult trauma centers in Mississippi are required to function at one of the three levels of pediatric trauma care: tertiary, secondary, or primary. The components which must be present in a trauma center designated to care for pediatric patients are set forth in the *Mississippi Trauma Care System Regulations*. (MTCSR, §XVI. 16.2)

At tertiary and secondary levels it is essential that the trauma center credential its trauma surgeons to do pediatric trauma care. It is desirable that the primary level trauma center credentials its trauma surgeons to do pediatric trauma care. The multispecialty concept is important in obtaining the best results when caring for traumatized children. This may include pediatric and other medical specialists. If there is a board certified surgeon identified as the adult trauma program medical director, then this same individual can and often will assume supervision of the pediatric program. (MTCSR, §XVI. 16.2)

Suggested Guidelines for Pediatric Transfer Criteria are included in this section on pages X-14.

Children's hospitals should take a leadership role in the care of injured children. Children's hospitals which are trauma centers must interact effectively with all hospitals providing care for children, whether severely or minimally injured. These institutions must establish working relationships with other hospitals providing pediatric care. The main characteristic of a children's hospital is dedicated resources to provide for the needs of a pediatric patient population. Those resources which must be present in a dedicated pediatric facility are set forth in Section XVI of the *Mississippi Trauma Care System Regulations*.

Each participating facility in the North Mississippi Trauma System, Inc. shall have a prearranged transfer agreement in place with a facility providing a pediatric critical care service and a pediatric intensive care unit.

SUGGESTED GUIDELINES FOR PEDIATRIC TRANSFER CRITERIA

Pediatric Trauma Patients that exhibit any of the following are appropriate patients for transfer to a children's hospital.

1. Ineffective or absent ventilatory effort requiring endotracheal intubation/ventilatory support.
2. Respiratory distress or failure
3. Depressed or deteriorating neurological status
4. Bradycardia not responsive to oxygenation
5. Cardiac rhythm disturbances
6. Status post cardiopulmonary arrest
7. Shock
8. Severe hypothermia
9. Injuries requiring any blood transfusion
10. Extremity injury complicated by neurovascular or compartment syndrome
11. Fracture of two or more long bones
12. Fracture of axial skeleton
13. Spinal cord injuries
14. Traumatic amputation of an extremity with potential for replantation
15. Head injury accompanied by one of the following
 - (a) CSF leaks
 - (b) Open head injuries (except simple scalp lacerations)
 - (c) Depressed skull fractures
 - (d) Decreased level of consciousness
 - (e) Focal neurological signs
 - (f) Basilar skull fracture
16. Significant penetrating wounds to the head, neck, thorax, abdomen, or pelvis
17. Major pelvic fractures
18. Significant blunt injury to the chest or abdomen
19. Children requiring intensive care

20.Children sustaining burns with any of the following

- (a) 2nd and 3rd degree burns of greater than 10% BSA for children less than ten years of age
- (b) 2nd and 3rd degree burns of greater than 20% BSA for children over 10 years of age
- (c) 3rd degree burns of greater than 5% BSA for any age group
- (d) Signs or symptoms of inhalation injury
- (e) Respiratory distress
- (f) Facial burns or including the mouth or throat
- (g) Burns to the ears (Serious full thickness burns or burns involving the ear canal)
- (h) Deep or excessive burns of the hands, feet, genitalia, major joints, or perineum
- (i) Electrical injury/burns

21. Patient requires invasive monitoring or vasoconstrictive medications

22.Orbital or facial fractures

23.Diffuse abdominal tenderness

INTEGRATION OF PEDIATRIC HOSPITALS POLICY

PURPOSE: Provide for pediatric trauma care.

POLICY: The North Mississippi Trauma System, Inc. shall integrate pediatric hospitals into the regional system.

1. All trauma centers designated by the MSDOH shall maintain a transfer agreement with a designated pediatric trauma center.
2. Each facility shall arrange for transfer according to their agreement.
3. The North Mississippi Trauma System, Inc. shall facilitate and encourage the pediatric trauma center to provide educational and preventative informational resources into the Region's training, educational, and preventative services.

AVALIABILITY OF TRAUMA CENTER EQUIPMENT

Based on the level of designation, each participating facility in the North Mississippi Trauma System, Inc. will have the equipment required by the *Mississippi Trauma Care System Regulations* readily available for the treatment of trauma patients. It is recommended that the Trauma Nurse Coordinator periodically inventory the equipment to ensure continued compliance with the *Mississippi Trauma Care Regulations*.

AVAILABILITY OF TRAUMA TEAM PERSONNEL

Facilities at each level are required to designate a trauma team, and shall develop written policies describing the roles of all personnel on the trauma team, the availability of team members, response times of team members, and certification requirements for team membership. These policies shall comply with the requirements for trauma teams at each level, as set forth in the *Mississippi Trauma Care System Regulations*.

The composition of the trauma team in any hospital will depend on the characteristics of that hospital and its resources. In some facilities a tiered response system may be appropriate. Suggested compositions of the trauma teams in each level facility are set forth in the respective sections of the *Mississippi Trauma Care System Regulations*.

As required by the *Mississippi Trauma Care System Regulations*, the director of the emergency department along with the facility's trauma program director shall establish trauma-specific credentials that should exceed those that are required for general hospital privileges. Examples of credentialing requirements would include skill proficiency, training requirements, conference attendance, education requirements, ATLS verification, and specialty board certification.

The trauma team shall be available or on call as specified in the *Mississippi Trauma Care System Regulations*.

AVAILABILITY OF TRAUMA CENTER PERSONNEL AND EQUIPMENT POLICY

PURPOSE: To ensure regulatory compliance with Mississippi Trauma Care System requirements regarding the availability of resources.

POLICY: All participating hospitals in the North Mississippi Trauma System, Inc. shall comply with *Mississippi Trauma Care System Regulations* by maintaining a constant state of readiness with their level of certification.

1. Surgeons, orthopedic surgeons, anesthesiologists, radiologists must be either present or on-call and promptly available. Emergency Department physicians must always be present in Level I, II, and III hospitals and be available within 30 minutes in Level IV hospitals.
2. All hospitals shall have a designated trauma team consisting of physicians, specialists, nurses, and clinical ancillary personnel which should be either present or on-call and promptly available.
3. All facilities shall have a designated system for alerting and ensuring response times of staff in 30 minutes or less. Methods of activation may include, but are not limited to, cell phones, pagers, two-way radios, or maintaining on-call staff on the premises. Response times shall be documented and provided to the Region.
4. Surgeons, orthopedic surgeons, anesthesiologists, radiologists, and emergency medicine physicians must be appropriately boarded and maintain adequate CEUs and general surgeons and emergency medicine physicians additionally be certified in ATLS. CRNAs must be licensed to practice in the State of Mississippi.
5. All equipment used in trauma care shall be in working order, adequate for need and level, and meet appropriate current FDA requirements for patient care.

6. Hospitals experiencing a temporary loss of equipment capability due to failure or repair shall arrange for replacement of equipment and or proactively arrange for patient transfer or bypass as deemed necessary by that hospital's Trauma Medical Director.

SUGGESTED CRITERIA FOR ACTIVATION OF A TRAUMA TEAM POLICY

PURPOSE: To provide hospitals in the North Mississippi Trauma System, Inc. with guidelines for the activation of their respective trauma teams.

POLICY: All participating hospitals in the North Mississippi Trauma System, Inc. shall establish criteria for the activation of their respective trauma teams. These criteria will be clearly noted in each institution's trauma policy. The following is intended to serve as a general guideline for the hospitals, as each hospital within the North Mississippi Trauma System, Inc. is unique.

1. Immediate activation of the trauma team
 - a. GCS of less than 13
 - b. Systolic Blood Pressure < 90
 - c. Respiratory Rate <10 or >29
 - d. Revised Trauma Score <11
 - e. Pediatric Trauma Score <9
 - f. Penetrating injury to the head, neck, torso, or extremities above the elbows or knees
 - g. Flail Chest
 - h. Two or more proximal long bone fractures
 - i. Pelvic Fracture
 - j. Limb Paralysis
 - k. Amputation proximal to the wrist or ankle
 - l. Body surface burns > 15% (second or third degree) or burns associated with other traumatic or inhalation injuries
 - m. Trauma transfer that is intubated or receiving blood
 - n. Children under 12 with any of the historical flats outlined below
2. If none of the above apply, then evaluate the mechanism (Stable patient > 12 years old)
 - a. Ejection from vehicle
 - b. Death in same passenger compartment

- c. Extrication time > 20 minutes
- d. Fall > 20 Feet
- e. Rollover MVA
- f. High Speed auto crash (>40 mph)
- g. Auto deformity of > 20 inches of external damage or > 12 inches of intrusion into passenger compartment
- h. Auto vs. pedestrian or Auto vs. bicycle
- i. Pedestrian thrown or run over
- j. Motorcycle crash > 20 mph or separation of rider from the bike.

If yes to any of the above, the attending ER physician may at his own discretion and medical judgment activate a full trauma team or a modified activation.

MECHANISM FOR AVAILABILITY OF SPECIALIST

Each participating facility in the North Mississippi Trauma System, Inc. will have a written policy delineating the availability of specialist based on the regulatory requirements of their designated level as set forth in the *Mississippi Trauma Care System Regulations*. Availability of specialist should be regularly inventoried and on-call schedules shall be maintained to ensure coverage.

SYSTEM EVALUATION AND PERFORMANCE IMPROVEMENT POLICY

PURPOSE: To improve performance of the system.

POLICY: The North Mississippi Trauma System, Inc. shall review and evaluate the regional trauma care system to improve performance.

1. Each facility shall participate in the statewide trauma registry.
2. Each participating facility shall develop an internal P plan that minimally addresses the following key components:
 - a. a multidisciplinary trauma committee
 - b. clearly defined authority and accountability for the program
 - c. clearly stated goals and objectives of which should be the reduction of inappropriate variation in care
 - d. development of expectations from evidence based guidelines, pathways, and protocols
 - e. explicit definitions of outcomes derived from institutional standards
 - f. documentation system to monitor performance, corrective action and the results of the actions taken
 - g. a process to delineate privileges credentialing all trauma service physicians
 - h. an informed peer review process utilizing a multidisciplinary method
 - i. a method for comparing patient outcomes with computed survival probability
 - j. autopsy information on all deaths when available
 - k. medical nursing audits
 - l. reviews of pre-hospital care and times and reasons for both trauma bypass and transfers
3. The North Mississippi Trauma System, Inc. shall collect and report data to the State and to participating hospitals.

4. The North Mississippi Trauma System, Inc. shall evaluate and review the following for effectiveness:
 - a. the components of the regional system
 - b. triage criteria and effectiveness
 - c. activation of the trauma team
 - d. notification of specialists and ancillary personnel
 - e. trauma center diversions and transfers
5. The North Mississippi Trauma System, Inc. shall develop a performance improvement process that identifies root causes of problems and provides for continuous improvement of the system.
6. The performance improvement process shall provide for input and feedback from patients, guardians, and provider staff.

PROFESSIONAL AND STAFF TRAINING POLICY

PURPOSE: To provide guidelines regarding the training of participants healthcare providers in the care of the trauma patients.

POLICY: The North Mississippi Trauma System, Inc. shall facilitate and maintain the provision of training opportunities for participating facilities. Individual hospitals and physicians must maintain clinical qualifications as specified by the *Mississippi Trauma Care System Regulations*.

1. As specified by level designation, hospital staff is defined as nurses, allied health and employed pre-hospital personnel.
2. The North Mississippi Trauma System, Inc. shall transfer any provided information regarding trauma triage guidelines and operational procedural changes associated with trauma care to all participating hospitals and EMS providers located in the region to maintain their current state or readiness. This may be through any means deemed appropriate by the Board of Directors,
3. Individual facilities are responsible for disseminating the information to their staff. The North Mississippi Trauma System, Inc. shall assist with the coordination and promotion of any multi-facility educational sessions on trauma care.
4. The North Mississippi Trauma System, Inc. shall provide training to hospital staff on its trauma policies and procedures.
5. Physicians are required to maintain ATLS and a yearly average of 16 hours (48 over 3 years) of CMEs as specified by hospital level and clinical specialty in the *Mississippi Trauma Care System Regulations*. The North Mississippi Trauma System, Inc. shall relay any information regarding physician's educational opportunities to the participating facilities.

PUBLIC INFORMATION AND EDUCATION POLICY

PURPOSE: To provide a format for informing and educating the general public residing in the North Mississippi Trauma System, Inc. Region. Also, to provide regulatory oversight for the marketing and advertising by the agencies participating in the Region's Trauma Plan.

POLICY: The North Mississippi Trauma System, Inc. shall develop and maintain a program of public information and education. Participating agencies shall cooperate with the North Mississippi Trauma System, Inc. regarding the promotion of their trauma programs.

1. The North Mississippi Trauma System, Inc. shall establish a network among its participating hospitals and other providers for the purpose of providing educational materials. The participating hospitals and other providers shall provide the informational and educational materials to the general public through any means deemed acceptable to the Region's Board of Directors.
2. The North Mississippi Trauma System, Inc. shall facilitate speakers, address public groups and serve as a resource for trauma education.
3. The North Mississippi Trauma System, Inc. shall assist its participating agencies in the development and provision of education to the public regarding the topics of injury prevention, safety education, and access to the system.
4. No participating agency shall use the terms "trauma center, trauma facility, trauma care provider" or similar terminology in its signs, printed material, or public advertising unless the materials meets the requirements set forth in the *Mississippi Trauma Care System Regulations*.

5. All marketing and promotional plans relating to the trauma program shall be submitted to the North Mississippi Trauma System, Inc. for review and approval prior to implementation. Such plans shall be reviewed and approved based on the following guidelines:
 - a. the information is accurate
 - b. the information does not include false claims
 - c. the information is not critical of other system participants
 - d. the information shall not include any financial inducements to any providers or third parties

INJURY PREVENTION PROGRAMS POLICY

PURPOSE: The purpose of the policy is to provide a format for the North Mississippi Trauma System, Inc.'s participation in injury prevention.

POLICY: The North Mississippi Trauma System, Inc. shall participate in injury prevention activities.

- 1. The North Mississippi Trauma System, Inc. shall assist participating facilities with the provision of injury prevention activities.**
- 2. The North Mississippi Trauma System, Inc. shall facilitate and encourage the coordination of injury prevention activities with other regions.**
- 3. Each participating facility shall be encouraged to provide an injury prevention activity yearly.**

NORTH MISSISSIPPI TRAUMA SYSTEM, INC.

CHANGE IN BOARD OF DIRECTORS SEAT

The following procedure will be used to change the person holding a seat on the Board of Directors for a member facility.

1. The participating facility will submit the proposed change with the person's name, job title, and reason for change in appointment to the Regional Trauma Nurse Coordinator in writing.
2. The Regional Trauma Nurse Coordinator will submit the proposed change at the next Executive Committee Meeting.
3. The Executive Committee will review the proposed change and accept or deny the facility's request for change.
4. The facility will be notified in writing of the Executive Committee's ruling regarding the proposed change.

Approved 4/3/01

NORTH MISSISSIPPI TRAUMA SYSTEM, INC.

NOTIFICATION OF CHANGE IN PERSONNEL

North Mississippi Trauma System, Inc. requires all member facilities to notify the Regional Trauma Nurse Coordinator in writing of the following changes in personnel related to the trauma system:

- Trauma Nurse Coordinator
- Trauma Registrar
- Trauma Program Director
- Hospital Administrator
- Addition of participating physician
- Deletion of participating physician
- Addition or deletion of hospital based ambulance service

Written notification must be received in the Regional Trauma Nurse Coordinator's office within 15 days of implementation of the change.

Approved 4/3/01

NORTH MISSISSIPPI TRAUMA SYSTEM, INC.

NON-COMPLIANCE POLICY

All facilities participating as a member of the North Mississippi Trauma System, Inc. will comply with all requests and deadlines set forth by the Mississippi State Department of Health and the North Mississippi Trauma System, Inc. This policy has been developed to prevent the Mississippi State Department of Health from penalizing the Region as a whole for the actions of a single facility.

Notification of Deadlines

1. All deadlines and request from the Mississippi State Department of Health, distributed to the members through the Region, will be forwarded to member facilities immediately upon the Region's receipt of said requests and deadlines.
2. The Region will notify member facilities of all Regional requests and deadlines in writing a minimum of 10 working days prior to the deadline.

Penalty for Non-Compliance

1. The Regional Trauma Nurse Coordinator will notify the facility's two Board Members and the Trauma Nurse Coordinator of the facility in writing one day after the facility is non-compliant.
2. A Penalty Assessment of an amount equal to 25% of the past year's reimbursement will be assessed to the facility if the facility remains non-compliant one week following notice.
3. An additional Penalty Assessment of an amount equal to 25% of the last year's reimbursement for each additional week the participant is non-compliant.

4. Once the member facility becomes 14 calendar days delinquent they must meet with the Regional Trauma Nurse Coordinator to address the problem.
5. If the member facility is non-compliant twice in the same year, they have established a pattern of non-compliance and must submit a plan of corrective action to the Executive Committee of the Region for review. This plan must be submitted within 30 calendar days of notification of the second incident of non-compliance.

Approved 4/3/01

CRITICAL CARE CAPABILITY WITHIN THE REGION

The North Mississippi Trauma System, Inc. will require that the Level II and Level III facilities in the region maintain the standards set forth in the *Mississippi Trauma Care Regulations* regarding the availability of surgeons.

Not all facilities in the Region have tertiary care available for burns, spinal cord injuries, or rehabilitation. When these services are not available the facility is required to have transfer agreements in place with the appropriate facilities.

All facilities in the Region are required to provide initial evaluation and stabilization to the best of their ability to pediatric patients. They are required to have an agreement with a facility offering a pediatric critical care service and a pediatric intensive care unit.

The following chart gives an overview of the critical care resources in the region.

CRITICAL CARE CHART

	ICU BEDS	ANGIO	CT	OR BEDS	GENERAL SURGEONS	NEURO SURGEONS	ORTHO SURGEONS	CARDIO- PULMONARY BYPASS	DIALYSIS	IN PATIENT REHAB
NMMC	8*	X	X	16	6		9	X	X	X
BMH-GT	18	X	X	10	4	1	3	X	X	X
BMH-N MS	20		X	6	3	1	3	X		X
OCH	6		X	5	4		2			X
GIMORE MEMORIAL	9		X		2		1			X
BMH-BOONEVILLE	8	X	X	1						X
BMH-UNION COUNTY	8		X	3	2		1			X
CALHOUN HEALTH SERVICES										
CCMC	6		X	2	3	0	1			X
CHOCTAW COUNTY MEDICAL CENTER										
MAGNOLIA REGIONAL HEALTH CENTER	12	X	X	7	3		2			X
PIONEER HEALTH CENTER										
PONTOTOC HEALTH SERVICES			X							X
TIPPAH COUNTY HOSPITAL	8		X	1	1					X
TISHOMINGO HEALTH SERVICES										
TRACE REGIONAL HOSPITAL	2			1	1					
WEBSTER HEALTH SERVICES			X							X

*Designated Trauma/Neuro ICU beds. General ICU beds can be converted to Trauma ICU beds as needed.

PERFORMANCE IMPROVEMENT

Performance Improvement is the key to monitoring, evaluating and improving the trauma system. It involves a continuous multidisciplinary effort to measure, evaluate and improve both the process of care and the outcome. A major objective of PI is to reduce inappropriate variation in care. Trauma centers at all levels, EMS services, and the regional system itself, are expected to demonstrate a clearly defined PI program.

All Trauma Centers shall develop and have in place a performance improvement process focusing on structure, process and outcome evaluations which focus on improvement efforts to identify root causes, problems, intervene to reduce or eliminate these causes, and take steps to correct the process. In addition, the process shall include:

- (a) A detailed audit of all trauma-related deaths, major complications and transfers (including interfacility transfers)
- (b) A multidisciplinary trauma peer review committee that includes all members of the trauma team
- (c) Participation in the trauma system data management system
- (d) Each trauma center shall have a written system in place for the following:
 - Patients (children)
 - Parents of minor children who are patients
 - Legal guardian(s) of children who are patients
 - Primary caretaker(s) of children who are patients
- (e) The ability to follow-up on corrective actions to ensure performance improvement activities

The system shall provide for input and feedback from these patients and guardians to hospital staff regarding the care provided. (*Mississippi Trauma Care System Regulations, Section IX*)

The Region is responsible for ongoing evaluation of its system. Accordingly, the Region will develop a procedure for receiving information from EMS providers, Trauma Centers and the local medical community on the implementation of various components of the Region's Trauma System, including, but not limited to:

- (1) components of the Regional Trauma Plan
- (2) triage criteria and effectiveness
- (3) activation of the trauma team
- (4) notification of specialists
- (5) trauma center diversion. (*MTCSR*, SVIII. 8.1)

Based upon information received by the Region in the evaluation process, the Region shall annually (or as often as is necessary to insure system performance) prepare a report containing results of the evaluation and a performance improvement plan. Such report shall be made available to all EMS providers, Trauma Centers and the local medical community.

The Region shall ensure that all Trauma Centers participate in this annual evaluation process, and encourage all other hospitals that treat trauma patients to do likewise.

Specific information related to an individual patient shall not be released. Aggregate system performance information and evaluation will be available for review. (*MTCSR*, SVIII. 8.2)

Currently there are multiple technical problems associated with the Regional Trauma Registry. The MSDOH is aware of these problems and is working with the software programmers to correct them. Until such time as the Regional Registry is fully functional the Region must depend upon voluntary submission of protocol violations and morbidities, certainly not the most effective method of assuring complete data.

NORTH MISSISSIPPI TRAUMA SYSTEM, INC.

Performance Improvement Plan for Trauma Patients for Emergency Medical Service Providers

I. PURPOSE

The purpose of the pre-hospital record audit is to establish a method of evaluation for the pre-hospital care being delivered, and thus be able to establish benchmarks as goals for improvement. Data from agencies within the North Trauma Care Region will be collected, organized and evaluated and the results utilized for continued system improvement. As the Performance Improvement evaluation continues, changes will be implemented in the plan, especially in the area of goals and indicators. Feedback will be provided to EMS agencies, as this is an important aspect of quality improvement. Results of the evaluations will also be made to the State office, as well as the North Trauma Care Region Board of Directors.

II. POLICY

EMS agencies will be required to provide audit reports on a quarterly basis. Prior to each quarter, agencies will receive a request from the Regional Director listing specific filters (indicators) with which to assess records for the upcoming quarter as directed by the Regional Medical Control Committee. This report should be returned to the Regional Director within 30 days. Indicators requested will be not less than three (3), nor more than six (6) for one quarter. Additionally, there may be a random request for a specific filter if there is a need indicated, or if requested by the Regional Medical Control Committee.

NORTH MISSISSIPPI TRAUMA SYSTEM, INC.
Performance Improvement Plan for Trauma Patients for
Emergency Medical Service Providers

III. PROCEDURE

Attached is an appendix with a list of indicators from which the Regional Medical Control Committee will choose three (3) to six (6) per quarter. Letters will be sent out to each EMS agency in the Region at least 14 days in advance with the specific indicators for the following quarter. The audit should be completed and returned to the Regional Director within 30 days of the end of the quarter.

IV. CORRECTIVE ACTION

In order to reduce variations of care, once problems are identified, the EMS Agency will be asked to submit a plan to correct identified problems. The plan should include what the desired changes are, who is assigned to resolve the problem, and what action will be taken. Mississippi EMS statutes (§41-59-9, *Mississippi Code Annotated*) mandate pre-hospital providers' compliance with this Trauma Plan, including these Performance Improvement policies and procedures. Noncompliance with this policy will be considered a violation of Mississippi law and EMS Rules and Regulations and will be reported to the Division of EMS, MSDH for administrative enforcement.

V. RE-EVALUATION

Three months after the corrective action plan has been submitted, the problem identifier will be re-evaluated. The EMS agency will receive documentation of any findings, as well as any need for continued action.

VI. CONFIDENTIALITY

North Mississippi Trauma System, Inc. will abide by the laws of the State of Mississippi regarding confidentiality. Patient names or other identifying criteria will not be used in reports or audits that are distributed to the

Board of Directors or the State. Any records received by the administrator shall be stored under lock and key until destroyed.

NORTH MISSISSIPPI TRAUMA SYSTEM, INC.

**Performance Improvement Plan for Trauma Patients for
Emergency Medical Service Providers**

APPENDIX A

RECOMMENDED EMS Audit Indicators

1. IV lines established where attempted
2. Intubation established where attempted
3. A scene time < 10 minutes (except in prolonged extrication)
4. Vital signs complete
5. Hospital destination appropriate
6. GCS recorded in categories
7. Pediatric Coma Score recorded in categories
8. RTS recorded
9. Emergent calls dispatched within 60 seconds
10. Length of time between Dispatch times and Arrival times for transfers out (hospital to hospital)
11. If patient in EMS care longer than 15 minutes, additional sets of VS documented
12. O2 use documented
13. Timely pre-arrival communication with receiving hospital
14. Documentation that written report left at health care facility with patient
15. Compliance with regional trauma guidelines and protocols
16. Any Bypass or Diversion orders/protocols initiated

TRAUMA TRIAGE AND TRANSPORT GUIDELINES

Purpose: To provide EMS Agencies operating within the Northern Trauma Care Region with general guidelines for pre-hospital triage and transport of the trauma patient.

A. The following criteria are recommended guidelines for activation of the Regional Trauma System. These criteria were adopted by North Mississippi Trauma System, Inc. as general guidelines for activation of the Trauma Center Trauma Team and should therefore be used as a tool in identifying the major or multiple-injury trauma patient:

1. Glasgow Coma Scale (GCS) < 14
2. Systolic Blood Pressure < 90
3. Respiratory Rate < 10 or > 29
4. Penetrating injury to the head, neck, torso, or extremities above the elbows or knees
5. Flail chest
6. Two or more proximal long bone fractures
7. Pelvic Fracture
8. Limb paralysis
9. Amputation proximal to the wrists or ankle
10. Body surface burns > 15% (second or third degree) or burns associated with other traumatic or inhalation injury
11. Trauma transfer that is intubated or receiving blood
12. Children under 12 with any of the historical facts outlined below:

If none of the above applies, evaluate mechanism (Stable patient > 12):

1. Ejection from vehicle with signs of injury and/or accompanying pain.
2. Death in the same passenger compartment
3. Extrication time > 20 minutes
4. Fall > 20 Feet
5. Rollover MVC with signs and symptoms of injury and or accompanying pain
6. High speed auto crash > 40 mph.

TRAUMA TRIAGE GUIDELINES

STATEMENT OF INTENT:

The following trauma triage guidelines are provided to assist EMS providers in determining the disposition of adult trauma patients from the field. It is understood that these are guidelines only and are to be used in conjunction with clinical judgment and communication with a medical control physician if at all possible. Trauma Patients meeting Trauma Triage Criteria should be transported to the closest most appropriate Designated Trauma Center with ALS transportation if available.

STEP I: PHYSIOLOGY

- Glasgow Coma Scale +/- 12 or AVPU=P or U
- Systolic BP < 90
- Pulse <60/min or >130/min
- Respirations <10/min or >29/min

➡
YES

To most appropriate TRAUMA CENTER with ATLS transport if available.

NO



STEP II: ANATOMY

- Penetrating injuries to head, neck, torso or extremities
- Flail chest
- Fractures-more than one fracture involving the humerus and/or femur
- Pelvic Fractures
- Paralysis or evidence of a spinal cord injury
- Amputation above the wrist or ankle
- Burns combined with other major injuries
- High voltage electrical injury

➡
YES

To most appropriate TRAUMA CENTER with ATLS transport if available.

NO



STEP III: MECHANISM OF INJURY

- Ejection from a motor vehicle
- Extrication time >20 min with an injury
- Falls > 20 feet
- Unrestrained passenger in a vehicle rollover
- Pedestrian or cyclist thrown or run over

➡
YES

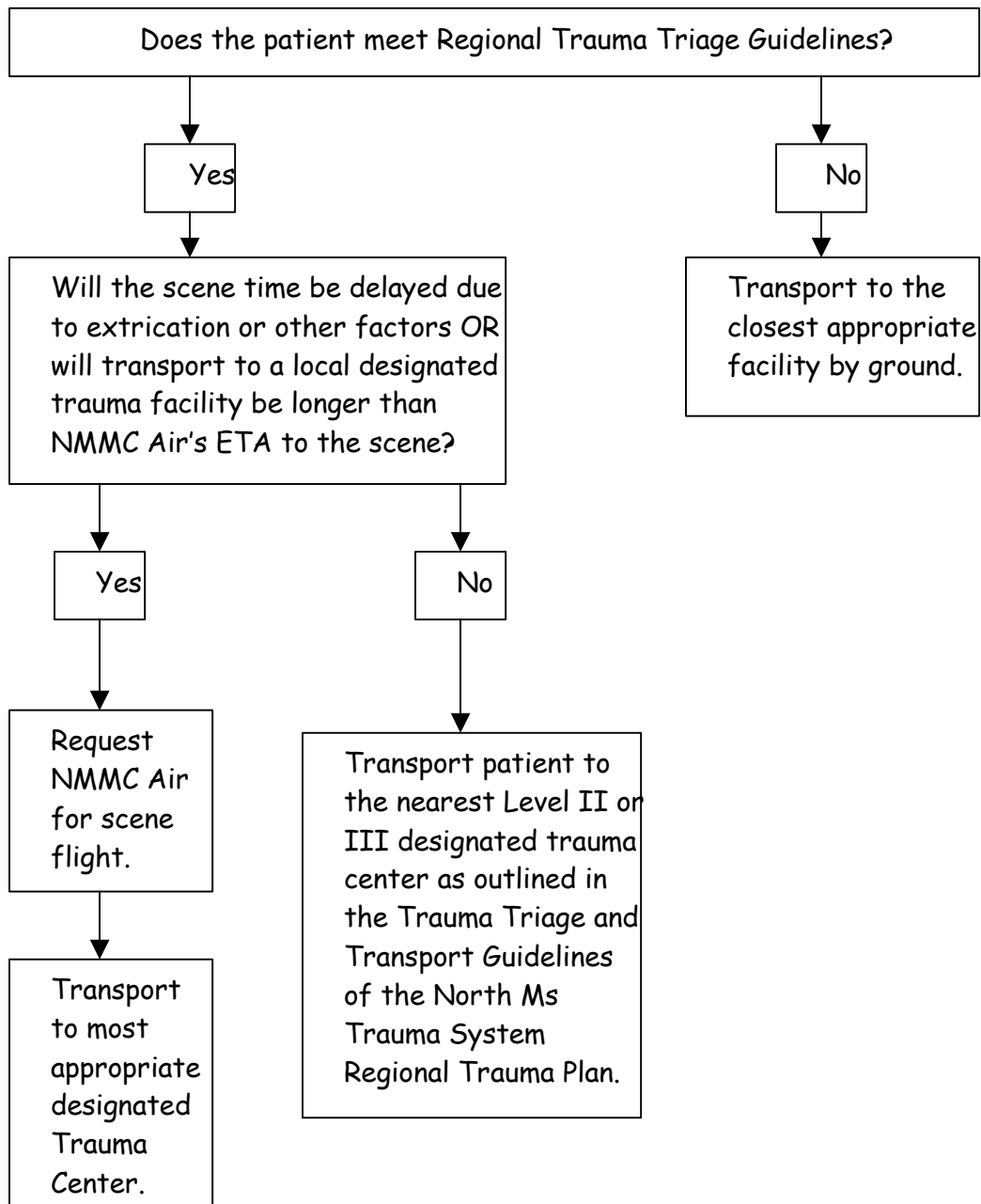
To most appropriate TRAUMA CENTER with ATLS transport if available.

NO



TO LOCAL HOSPITAL

HELICOPTER DECISION TREE



If at any time the EMT or Paramedic is unsure if the helicopter should be requested for a scene flight or of the appropriate destination for a trauma patient, on-line medical control should be contacted immediately.

